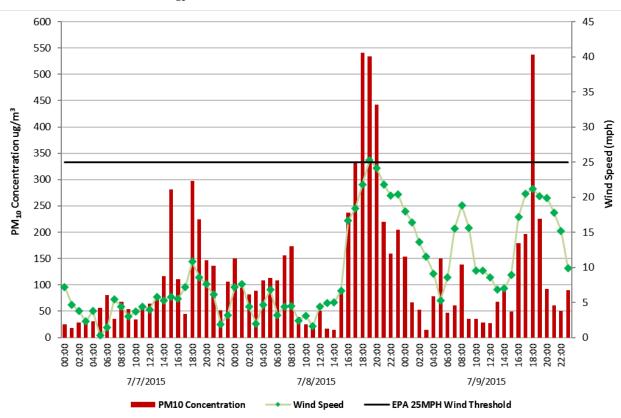
Appendix C Correlated PM₁₀ Concentrations and Winds

The following graphs illustrate the direct correlation between wind speeds¹ and PM₁₀ concentrations at select monitoring sites within the Salton Sea Air Basin on July 8, 2015. Note a variety of instruments measure wind speed at different times during any given hour. Therefore, the following graphs reflect the hour of the wind measurement.

IMPERIAL COUNTY SELECT SITES (FIGURES C-1 to C-4)

FIGURE C-1 NILAND PM $_{10}$ CONCENTRATION AND WIND SPEED CORRELATION



Figs C-1: Niland measured increased levels of PM $_{10}$ as winds speeds increased during the afternoon on July 8, 2015. Concentrations declined shortly after winds at the station reached their peak, indicating dust was being swept downstream. Wind data from the EPA's AQS data bank

147

¹ National Weather Service; NOAA's Glossary – Wind Speed: The rate at which air is moving horizontally past a given point. It may be a 2-minute average speed (reported as wind speed) or an instantaneous speed (reported as a peak wind speed, wind gust, or squall); https://w1.weather.gov/glossary/index.php?letter=w



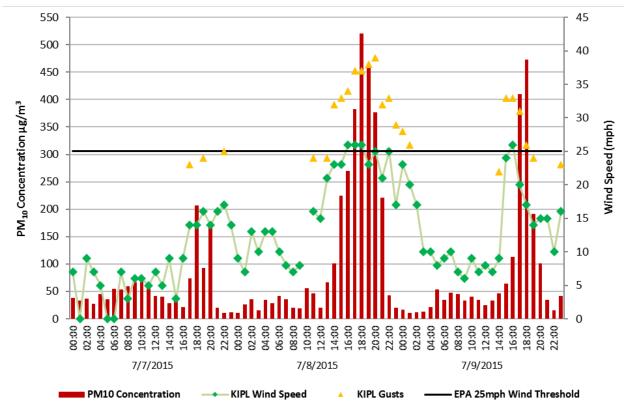


Fig C-2: Brawley measured increased levels of PM_{10} as winds speeds increased during the afternoon on July 8, 2015. However, it did not record an exceedance. Wind from Imperial County Airport, QCLCD data

EASTERN RIVERSIDE COUNTY MONITORING SITES

FIGURE C-3
TORRES-MARTINEZ DESERT CAHUILLA INDIANS
PM₁₀ CONCENTRATION AND WIND SPEED CORRELATION

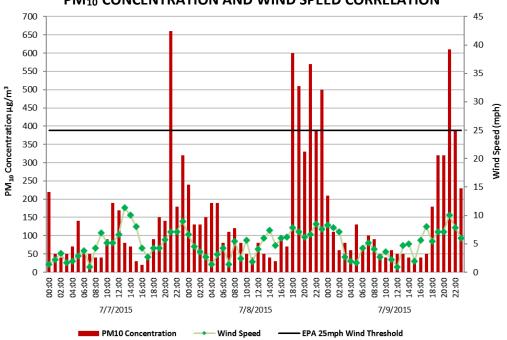


Fig C-3: Wind and air quality data from the EPA's AQS data bank

FIGURE C-4
INDIO (JACKSON ST) PM₁₀ CONCENTRATION AND WIND SPEED CORRELATION

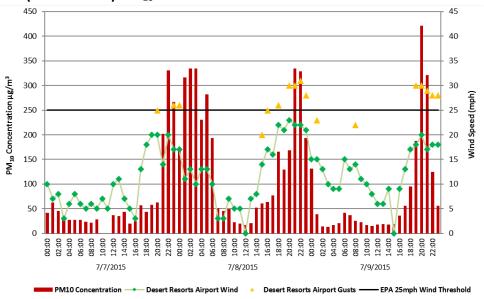


Fig C-4: Wind data is for Jacqueline Cochran-Desert Resorts Airport (KTRM)

FIGURE C-5 PALM SPRINGS FIRE STATION PM $_{10}$ CONCENTRATION AND WIND SPEED CORRELATION

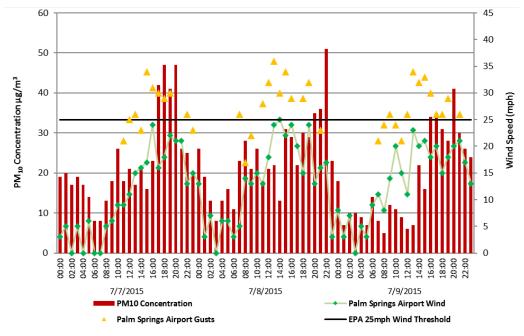


Fig C-5: Palm Springs Fire Station wind data from Palm Springs Airport

SOUTHWESTERN ARIZONA MONITORING SITE

FIGURE C-6 YUMA (ARIZONA) SUPERSITE PM₁₀ CONCENTRATION AND WIND SPEED CORRELATION

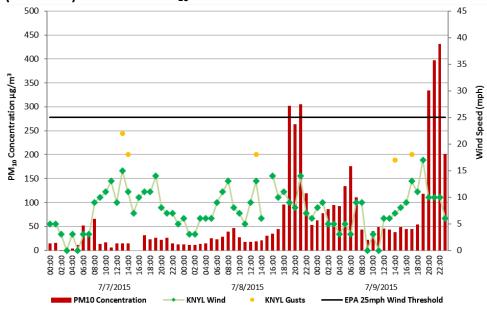


Fig C-6: Yuma Supersite in Yuma, Arizona, saw corresponding increases in particulate matter late in the day. Wind data from the Yuma MCAS QCLCD data